

=> d his

(FILE 'HOME' ENTERED AT 19:14:48 ON 30 JUL 2001)

FILE 'HCAPLUS' ENTERED AT 19:14:55 ON 30 JUL 2001
E MUTATION/CT
E E3+ALL

FILE 'REGISTRY' ENTERED AT 19:15:29 ON 30 JUL 2001
L1 1 S 9001-41-6/RN

FILE 'HCAPLUS' ENTERED AT 19:15:37 ON 30 JUL 2001

FILE 'REGISTRY' ENTERED AT 19:15:44 ON 30 JUL 2001
SET SMARTSELECT ON
L2 SEL L1 1- CHEM : 21 TERMS
SET SMARTSELECT OFF

FILE 'HCAPLUS' ENTERED AT 19:15:45 ON 30 JUL 2001
L3 4791 S L2
L4 114 S L3 AND (ESCHERICHIA COLI OR E# COLI OR PARACOLOBACTRUM COLIFO
L5 52 S L4 AND MUTA?
L6 1 S L5 AND PURIN?
L7 1 S L5 AND (ADENOSINE# OR GUANOSINE# OR INOSINE# OR XANTHOSINE#)

=> d ibib ab 1

L7 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:77676 HCAPLUS
DOCUMENT NUMBER: 130:152661
TITLE: *Escherichia* containing **mutants** of enzymes
associated with improved biosynthesis of purine
nucleosides by fermentation
INVENTOR(S): Matsui, Hiroshi; Kawasaki, Hisashi; Shimaoka, Megumi;
Takenaka, Yasuhiro; Kurahashi, Osamu
PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9903988	A1	19990128	WO 1998-JP3239	19980717
W: BR, CN, ID, JP, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				
PT, SE				
EP 1004663	A1	20000531	EP 1998-932584	19980717
R: DE, FR, GB, IT				
PRIORITY APPLN. INFO.:			JP 1997-194603	19970718
			WO 1998-JP3239	19980717

AB An *Escherichia* strain capable of producing purine nucleosides with improved yield is characterized as having (1) a PRPP (phosphoribosyl pyrophosphate) amidotransferase (encoded by gene *purF*) or PRPP synthase (gene *prs*) **mutant** lacking feedback inhibition; (2) inactivated purine repressor; (3) blocked synthetic pathway catalyzed by, e.g., succinyl-**adenosine** monophosphate synthase, that leads to the synthesis of other metabolic products; and/or (4) reduced ability of the nucleoside permease-regulated cellular up-taking of purine nucleosides.
Prepn. of **mutants** from *Escherichia coli* K12
strain W3110 was demonstrated.

REFERENCE COUNT: 6
REFERENCE(S):
(1) Kyowa Hakko Kogyo Co Ltd; JP 2500062 A
(2) Kyowa Hakko Kogyo Co Ltd; EP 282989 A HCAPLUS
(4) Kyowa Hakko Kogyo Co Ltd; EP 406436 A HCAPLUS
(5) Kyowa Hakko Kogyo Co Ltd; JP 63230094 A 1988
HCAPLUS
(6) Kyowa Hakko Kogyo Co Ltd; WO 9005784 A 1990
HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

.. (FILE 'HOME' ENTERED AT 18:25:51 ON 30 JUL 2001)

.. FILE 'HCAPLUS' ENTERED AT 18:26:05 ON 30 JUL 2001

L1 3389 S 9001-41-6/RN

FILE 'REGISTRY' ENTERED AT 18:28:12 ON 30 JUL 2001

L2 1 S 9001-41-6/RN

FILE 'HCAPLUS' ENTERED AT 18:28:24 ON 30 JUL 2001

FILE 'REGISTRY' ENTERED AT 18:28:29 ON 30 JUL 2001

SET SMARTSELECT ON

L3 SEL L2 1- CHEM : 21 TERMS

SET SMARTSELECT OFF

FILE 'HCAPLUS' ENTERED AT 18:28:30 ON 30 JUL 2001

L4 4791 S L3

L5 77 S L4 (L) PREP/RL

L6 5917 S PURINE NUCLEOSIDE# OR NUCLEOSIDES (L) PURINE OR PURINE RIBONU

L7 604 S L6 (L) PREP/RL

L8 4791 S L3

L9 1 S L7 AND L8

FILE 'CROPUS, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, HCAOLD, HCAPLUS, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, WPIDS' ENTERED AT 18:31:33 ON 30 JUL 2001

FILE 'REGISTRY' ENTERED AT 18:31:53 ON 30 JUL 2001

SET SMARTSELECT ON

L10 SEL L2 1- CHEM : 21 TERMS

SET SMARTSELECT OFF

FILE 'CROPUS, DGENE, DPCI, ENCOMPPAT, ENCOMPPAT2, EUROPATFULL, HCAOLD, HCAPLUS, IFIPAT, INPADOC, JAPIO, PAPERCHEM2, PATDD, PATDPA, PATOSDE, PATOSEP, PATOSWO, PCTFULL, PIRA, RAPRA, SYNTHLINE, TULSA, TULSA2, USPATFULL, WPIDS' ENTERED AT 18:31:54 ON 30 JUL 2001

L11 7616 S L10

L12 13273 S PURINE NUCLEOSIDE# OR NUCLEOSIDES (L) PURINE OR PURINE RIBONU

L13 1758 S L12 AND PREP/RL

L14 1 S L13 AND L11

L15 111 S L12 AND L11 AND (ESCHERICHIA COLI OR E# COLI OR PARACOLOBACTR

L16 74 S L15 AND FERMENT?

L17 70 DUP REM L16 (4 DUPLICATES REMOVED)

L18 9 S L17 AND PY<=1997

=> d ibib ab 1-9

L18 ANSWER 1 OF 9 EUROPATFULL COPYRIGHT 2001 WILA

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 504279 EUROPATFULL EW 199728 FS PS
TITLE: FERMENTATION PROCESS FOR THE PRODUCTION OF PYRIMIDINE DEOXYRIBONUCLEOSIDES.
FERMENTATIONSPROZESS ZUR HERSTELLUNG VON PYRIMIDIN.
PROCEDE DE FERMENTATION POUR PRODUIRE DES DESOXYRIBONUCLEOSIDES DE PYRIMIDINE.

INVENTOR(S): McDANDLISS, Russell, J., 939 Pointer Ridge Drive, Gaithersburg, MD 20078, US; ANDERSON, David, M., 13509 Bailey Drive, Rockville, MD 20850, US

PATENT ASSIGNEE(S): CHEMGEN CORPORATION, 16016 Industrial Drive, Gaithersburg, MD 20877, US

PATENT ASSIGNEE NO: 1075720

AGENT: Mercer, Christopher Paul, Carpmaels & Ransford 43, Bloomsbury Square, London WC1A 2RA, GB 46611

AGENT NUMBER: OTHER SOURCE: EPB1997043 EP 0504279 B1 970709

SOURCE: Wila-EPS-1997-H28-T1

DOCUMENT TYPE: Patent

LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch

DESIGNATED STATES: R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IT; R LI; R LU; R NL; R SE

PATENT INFO.PUB.TYPE: EPB1 EUROPÄISCHE PATENTSCHRIFT (Internationale Anmeldung)

PATENT INFORMATION:

	PATENT NO	KIND DATE
'OFFENLEGUNGS' DATE:	EP 504279	B1 19970709
APPLICATION INFO.:	EP 1991-901364	19901205
PRIORITY APPLN. INFO.:	US 1989-448158	19891208
RELATED DOC. INFO.:	WO 90-US6993	901205 INTAKZ
	WO 9109130	910627 INTPNR
REFERENCE PAT. INFO.:	EP 329062 A	EP 344937 A
REF. NON-PATENT-LIT.:	JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 211, no. 21, 10 November 1966; H.V. APOSHTIAN et al., pp. 5095-5101 METHODS IN ENZYMOLOGY, R. WU et al. (eds.), vol. 154, 1987, Academic Press, New York, NY (US); pp. 367-382 F.C. NEIHARDT et al. (eds.), "Escherichia Coli and Salmonella Typhimurium Cellular & Molecular Biology", vol. 2, 1987, American Society for Microbiology, Washington, DC (US); pp. 1276-1301 JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 261, no. 24, 25 August 1986; C.G. LERNER et al., pp. 11156-11165 JOURNAL OF BACTERIOLOGY, vol. 169, no. 5, May 1987; C.G. LERNER et al., pp. 2202-2206 A. MUNCH-PETERSEN (ed.), "Metabolism of Nucleotides, Nucleosides & Nucleobases in Microorganisms", 1983, Academic Press, London (GB); pp. 203-258 F.C. NEIHARDT et al., (eds.), "Escherichia Coli & Salmonella Typhimurium Cellular & Molecular Biology", 1987, American Society for Microbiology, Washington, DC (US); pp. 445-473 JOURNAL OF BACTERIOLOGY, vol. 137, no. 1, January 1979; T.J. PAULUS et al., pp. 82-91 JOURNAL OF BACTERIOLOGY, vol. 163, no. 3, September 1985; K.L. ROLAND et al., pp. 991-999 VIROLOGY, vol. 29, no. 1, May 1966; D.H. ROSCOE et al., pp. 157-167 ENZYME MICROBIAL TECHNOLOGY, vol. 6, January 1984; R.T. ROWLANDS, pp.	

3-10 ANNUAL REVIEW OF BIOCHEMISTRY, vol. 48, E.E. Snell et al. (eds.), 1979; pp. 133-158 JOURNAL OF BACTERIOLOGY, vol. 160, no. 1, October 1983; YAKOBSON et al., pp. 451-453 THE EMBO JOURNAL, vol. 1, no. 1, 1982; K.F. JENSEN et al., pp. 69-74

L18 ANSWER 2 OF 9 EUROPATFULL COPYRIGHT 2001 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

ACCESSION NUMBER: 277313 EUROPATFULL EW 198832 FS OS STA B
TITLE: Hybrid plasminogen activators.
Hybride Plasminogenaktivatoren.
Activateur de plasminogene hybride.
INVENTOR(S): Rajput, Bhanu, Dr., Pfeffingerstrasse 61, CH-4053 Basel, CH;
Chaudhuri, Bhabatosh, Dr., Maulbeerstrasse 15, CH-4058 Basel, CH;
Asselbergs, Fredericus Alphonsus Maria, Dr., Rainallee 88/3, CH-4125 Riehen, CH;
Meyhack, Bernd, Dr., Hoehenweg 9, CH-4312 Magden, CH;
Heim, Jutta, Dr., Rankackerweg 1, CH-4133 Pratteln, CH;
van Oostrum, Jan, Dr., Melchior Berristrasse 10, CH-4142 Muenchenstein, CH;
Alkan, Sefik, Prof. Dr., Binsenackerstrasse 3, CH-4125 Riehen, CH
PATENT ASSIGNEE(S): CIBA-GEIGY AG, Klybeckstrasse 141, CH-4002 Basel, CH
PATENT ASSIGNEE NO: 201300
AGENT: Zumstein, Fritz, Dr., et al, Braeuhausstrasse 4, D-8000 Muenchen 2, DE
OTHER SOURCE: ESP1988028 EP 0277313 A1 880810
SOURCE: Wila-EPZ-1988-H32-T1
DOCUMENT TYPE: Patent
LANGUAGE: Anmeldung in Englisch; Veroeffentlichung in Englisch
DESIGNATED STATES: R AT; R BE; R CH; R DE; R ES; R FR; R GB; R GR; R IT; R LI; R LU; R NL; R SE
PATENT INFO.PUB.TYPE: EPA1 EUROPÄISCHE PATENTANMELDUNG
PATENT INFORMATION:

	PATENT NO	KIND DATE
'OFFENLEGUNGS' DATE:	EP 277313	A1 19880810
APPLICATION INFO.:	EP 1987-117892	19880810
PRIORITY APPLN. INFO.:	GB 1986-29153	19871203
	GB 1987-1160	19861205
	GB 1987-9656	19870120
	GB 1987-15890	19870423
		19870706

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

ACCESSION NUMBER: 277313 EUROPATFULL EW 199704 FS PS
TITLE: Hybrid plasminogen activators.
Hybride Plasminogenaktivatoren.
Activateur de plasminogene hybride.
INVENTOR(S): Rajput, Bhanu, Dr., Pfeffingerstrasse 61, CH-4053 Basel, CH;
Chaudhuri, Bhabatosh, Dr., Maulbeerstrasse 15, CH-4058 Basel, CH;
Asselbergs, Fredericus Alphonsus Maria, Dr., Rainallee 88/3, CH-4125 Riehen, CH;
Meyhack, Bernd, Dr., Hoehenweg 9, CH-4312 Magden, CH;
Heim, Jutta, Dr., Rankackerweg 1, CH-4133 Pratteln, CH;
van Oostrum, Jan, Dr., Melchior Berristrasse 10, CH-4142 Muenchenstein, CH;

PATENT ASSIGNEE(S): Alkan, Sefik, Prof. Dr., Binsenackerstrasse 3, CH-4125
 Riehen, CH
 PATENT ASSIGNEE NO: CIBA-GEIGY AG, Klybeckstrasse 141, 4002 Basel, CH
 201300
 AGENT: Zumstein, Fritz, Dr. et al, Patentanwaelte, Dr. F.
 Zumstein, Dipl.-Ing. F. Klingseisen, Braeuhausstrasse 4,
 80331 Muenchen, DE
 13567
 AGENT NUMBER: 13567
 OTHER SOURCE: EPB1997007 EP 0277313 B1 970122
 SOURCE: Wila-EPS-1997-H04-T1
 DOCUMENT TYPE: Patent
 LANGUAGE: Anmeldung in Englisch; Veröffentlichung in Englisch
 DESIGNATED STATES: R AT; R BE; R CH; R DE; R ES; R FR; R GB; R GR; R IT; R
 LI; R LU; R NL; R SE
 PATENT INFO. PUB. TYPE: EPB1 EUROPAEISCHE PATENTSCHRIFT
 PATENT INFORMATION:

	PATENT NO	KIND	DATE
'OFFENLEGUNGS' DATE:	EP 277313	B1 19970122	19880810
APPLICATION INFO.:	EP 1987-117892		19871203
PRIORITY APPLN. INFO.:	GB 1986-29153		19861205
	GB 1987-1160		19870120
	GB 1987-9656		19870423
	GB 1987-15890		19870706
REFERENCE PAT. INFO.:	EP 155387 A	EP 231883 A	
REF. NON-PATENT-LIT.:	WO 87-04722 A		
JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 262, no. 24, 25 August 1987, American Society for Biochemistry & Molecular Biology Inc., Baltimore, MD (US); L. PIERARD et al., pp. 11771-11778; and D. GHEYSEN et al., pp. 11779-11784 BIOLOGICAL ABSTRACTS/RRM, Philadelphia, PA (US); C.J.M. DE VRIES et al., no. 34017897 & Thrombosis and Haemostasis 1987. vol. 58, no. 1 p314 BIOLOGICAL ABSTRACTS/RRM, Philadelphia, PA (US); S.G. LEE et al., no 34017896 & Thrombosis and haemostasis 1987, vol.58, no p313 CIRCULATION, vol. 77, no. 4, 1988; C.L. LUCORE et al., pp. 906-914 The journal of biological chemistry, vol. 262, no. 24, 25th August 1987, pages 11779-11784, The American Society for Biochemistry and Molecular Biology Inc., Baltimore, US; D. Gheysen et al			
ABEN	Novel single-chain hybrid plasminogen activators having an amino acid sequence composed of at least two subsequences corresponding in amino acid identity and number to subsequences of human t-PA and of human u-PA, and mutants thereof in which at least one of the N-glycosylation sites is modified such that glycosylation cannot take place at these sites exhibit valuable pharmacological properties. The hybrid plasminogen activators are produced by recombinant DNA technology.		

L18 ANSWER 3 OF 9
 ACCESION NUMBER: PCTFULL COPYRIGHT 2001 MicroPatent
 1997009427 PCTFULL
 TITLE (ENGLISH): VEGF-RELATED PROTEIN
 TITLE (FRENCH): PROTEINE APPARENTEE AU VEGF
 INVENTOR(S): LEE, James; WOOD, William
 GENENTECH, INC.
 PATENT ASSIGNEE(S):
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

	NUMBER	KIND	DATE
DESIGNATED STATES:	WO 9709427	A1 19970313	AL AM AT AU AZ BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SI SK TJ TM TR TT
UA UG UZ VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ
BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ
CF CG CI CM GA GN NE SN TD TG

APPLICATION INFO.: WO 1996-US14075 19960830
PRIORITY (ORIGINAL): US 1995-60/003491 19950908

ABEN A human VEGF-related protein (VRP) has been identified and isolated that binds to, and stimulates the phosphorylation of, the receptor tyrosine kinase Flt4. The VRP is postulated to be a third member of the VEGF protein family. Also provided are antibodies that bind to VRP and neutralize a biological activity of VRP, compositions containing the VRP or antibody, methods of use, chimeric polypeptides, and a signal polypeptide for VRP.

ABF Une proteine (VRP) appartenant au facteur de croissance vasculo-endothelial humain (VEGF) a ete identifiee et isolee. Cette proteine se lie au recepteur Flt4 tyrosine kinase et stimule la phosphorylation de ce recepteur. Cette proteine constitue, on le suppose, un troisieme element de la famille des proteines VEGF. L'invention porte egalement sur des anticorps qui se lient a cette proteine et qui en neutralisent l'activite biologique, des compositions renfermant cette proteine ou son anticorps, des methodes d'utilisation, des polypeptides chimeriques et un polypeptide signalant cette proteine.

L18 ANSWER 4 OF 9 PCTFULL COPYRIGHT 2001 MicroPatent
ACCESSION NUMBER: 1996033276 PCTFULL
TITLE (ENGLISH): NUCLEOTIDE SEQUENCE OF THE HAEMOPHILUS INFLUENZAE Rd GENOME,
FRAGMENTS THEREOF, AND USES THEREOF
TITLE (FRENCH): SEQUENCE NUCLEOTIDIQUE DU GENOME HAEMOPHILUS INFLUENZAE RD, DES FRAGMENTS DE CE DERNIER, AINSI QUE SES APPLICATIONS
INVENTOR(S): FLEISCHMANN, Robert, D.; ADAMS, Mark, D.; WHITE, Owen; SMITH, Hamilton, O.; VENTER, J., Craig
PATENT ASSIGNEE(S): HUMAN GENOME SCIENCES, INC.; JOHNS HOPKINS UNIVERSITY
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
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WO 9633276 A1 19961024

DESIGNATED STATES: AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI
GB GE HU IS JP KE KR KZ LK LR LS LT LU LV MD MG MK MN
MW MX NO NZ PL PT RO RU SD SE SG SI TM TR TT UA UG UZ
VN KE LS MW SD SZ UG AM AZ BY KG KZ MD RU TJ TM AT BE
DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI
CM GA GN ML MR NE TG

APPLICATION INFO.: WO 1996-US5320 19960422
PRIORITY (ORIGINAL): US 1995-8/426787 19950421
US 1995-8/476102 19950607
US 1995-8/487429 19950607

ABEN The present invention provides the sequencing of the entire genome of *Haemophilus influenzae* Rd, SEQ ID NO:1. The present invention further provides the sequence information stored on computer readable media, and computer-based systems and methods which facilitate its use. In addition to the entire genomic sequence, the present invention identifies over 1700 protein encoding fragments of the genome and identifies, by position relative to a unique Not I restriction endonuclease site, any regulatory elements which modulate the expression of the protein encoding fragments of the *Haemophilus* genome.

ABF La presente invention porte sur le sequencage de la totalite du genome d'*Haemophilus influenzae* Rd, SEQ ID NO.1. Elle concerne egalement les donnees de sequencage enregistrees sur support informatique, ainsi que les systemes informatiques et les procedes facilitant son utilisation. Outre la totalite de la sequence genomique, plus de 1700

fragments a codage proteique du genome sont identifies. Est egalement identifie de par son positionnement par rapport a un site a enzyme de restriction Not I, tout element regulateur qui module l'expression des fragments a codage proteique du genome Haemophilus.

L18 ANSWER 5 OF 9 PCTFULL COPYRIGHT 2001 MicroPatent
ACCESSION NUMBER: 1992003556 PCTFULL
TITLE (ENGLISH): PURIFIED THERMOSTABLE NUCLEIC ACID POLYMERASE ENZYME
FROM
TERMOTOGA MARITIMA
TITLE (FRENCH): ENZYME D'ACIDE NUCLEIQUE THERMOSTABLE PURIFIEE
PROVENANT DE
L'EUBACTERIE THERMOTOGA MARITIMA
INVENTOR(S): GELFAND, David, H.; LAWYER, Frances, C.; STOFFEL,
Susanne
PATENT ASSIGNEE(S): CETUS CORPORATION; GELFAND, David, H.; LAWYER,
Frances, C.; STOFFEL, Susanne
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
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WO 9203556	A1	19920305
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DESIGNATED STATES: AT AU BE CA CH DE DK ES FR GB GR IT JP LU NL SE US
APPLICATION INFO.: WO 1991-US5753 19910813
PRIORITY (ORIGINAL): US 1990-567244 19900813

ABEN A purified thermostable enzyme is derived from the eubacterium Thermotoga maritima. The enzyme has a molecular weight as determined by gel electrophoresis of about 97 kilodaltons and DNA polymerase I activity. The enzyme can be produced from native or recombinant host cells and can be used with primers and nucleoside triphosphates in a temperature-cycling chain reaction where at least one nucleic acid sequence is amplified in quantity from an existing sequence.
ABF On a extrait une enzyme thermostable purifiee de l'eubacterie Thermotoga maritima. Cette enzyme a un poids moleculaire determine par electrophorese sur gel d'environ 97 kilodaltons et une activite de polymerase I d'ADN. L'enzyme peut etre produite a partir de cellules hotes recombinantes ou naturelles et elle peut etre utilisee avec des initiateurs et des triphosphates de **nucleosides** dans une reaction en chaine a cycles thermiques dans laquelle au moins une sequence d'acide nucleique voit son nombre augmenter par rapport a la sequence existante.

L18 ANSWER 6 OF 9 PCTFULL COPYRIGHT 2001 MicroPatent
ACCESSION NUMBER: 1991009130 PCTFULL
TITLE (ENGLISH): FERMENTATION PROCESS FOR THE PRODUCTION OF
PYRIMIDINE
DEOXYRIBONUCLEOSIDES
TITLE (FRENCH): PROCEDE DE **FERMENTATION** POUR PRODUIRE DES
DESOXYRIBONUCLEOSIDES
DE PYRIMIDINE
INVENTOR(S): McDANDLISS, Russell, J.; ANDERSON, David, M.
PATENT ASSIGNEE(S): CHEMGEN CORPORATION
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
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WO 9109130	A1	19910627
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DESIGNATED STATES: AT AU BE CA CH DE DK ES FR GB GR IT JP KR LU NL SE
APPLICATION INFO.: WO 1990-US6993 19901205
PRIORITY (ORIGINAL): US 1989-448158 19891208
ABEN DNA coding for at least one enzyme that causes the accumulation of a pyrimidine deoxyribonucleoside is used, in conjunction with

metabolic mutations or heterologous DNA coding for metabolic enzymes that also increase pyrimidine deoxyribonucleoside production, to engineer cultured cells to express a pyrimidine deoxyribonucleoside (PdN) in recoverable quantities, providing a commercially useful **fermentation** source for PdNs.

ABF On utilise le codage de l'ADN pour au moins un enzyme qui provoque l'accumulation d'un desoxyribonucleoside de pyrimidine, conjointement a des mutations metaboliques ou un codage d'ADN heterologue pour des enzymes metaboliques qui font egalement augmenter la production de desoxyribonucleoside de pyrimidine, pour mettre au point un desoxyribonucleoside de pyrimidine (PdN) en quantites que l'on puisse recuperer, ceci constituant alors une source de **fermentation** utile pour les desoxyribonucleosides de pyrimidine (PdNs) utilisable au niveau commercial.

L18 ANSWER 7 OF 9 USPATFULL

ACCESSION NUMBER: 94:110696 USPATFULL
TITLE: DNA encoding a thermostable nucleic acid polymerase enzyme from *thermotoga maritima*
INVENTOR(S): Gelfand, David H., Oakland, CA, United States
Lawyer, Frances C., Oakland, CA, United States
PATENT ASSIGNEE(S): Hoffmann-La Roche Inc., Nutley, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE	
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PATENT INFORMATION:	US 5374553		19941220	<--
APPLICATION INFO.:	US 1990-567244		19900813 (7)	
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1988-143441, filed on 12 Jan 1988, now abandoned which is a continuation-in-part of Ser. No. US 1987-63509, filed on 17 Jun 1987, now patented, Pat. No. US 4889818 which is a continuation-in-part of Ser. No. US 1986-899241, filed on 22 Aug 1986, now abandoned			

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Hendricks, Keith D.
LEGAL REPRESENTATIVE: Gould, George M., Tramaloni, Dennis P., Sias, Stacey R.
NUMBER OF CLAIMS: 8
EXEMPLARY CLAIM: 1
LINE COUNT: 2092
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A purified thermostable enzyme is derived from the eubacterium *Thermotoga maritima*. The enzyme has a molecular weight of about 97 kilodaltons and DNA polymerase I activity. The enzyme can be produced from native or recombinant host cells and can be used with primers and nucleoside triphosphates in a temperaturecycling chain reaction where at least one nucleic acid sequence is amplified in quantity from an existing sequence.

L18 ANSWER 8 OF 9 USPATFULL

ACCESSION NUMBER: 93:41991 USPATFULL
TITLE: **Fermentation** process for the production of pyrimidine deoxyribonucleosides
INVENTOR(S): McCandliss, Russell J., Gaithersburg, MD, United States
Anderson, David M., Rockville, MD, United States
PATENT ASSIGNEE(S): Chemgen Corporation, Gaithersberg, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE	
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PATENT INFORMATION:	US 5213972		19930525	<--

APPLICATION INFO.: US 1989-448158 19891208 (7)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wax, Robert A.
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Foley & Lardner
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1658

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB DNA coding for at least one enzyme that causes the accumulation of a pyrimidine deoxyribonucleoside is used, in conjunction with metabolic mutations or heterologous DNA coding for metabolic enzymes that also increase pyrimidine deoxyribonucleoside production, to engineer cultured cells to express a pyrimidine deoxyribonucleoside (PdN) in recoverable quantities, providing a commercially useful **fermentation** source for PdNs.

L18 ANSWER 9 OF 9 USPATFULL

ACCESSION NUMBER: 92:25249 USPATFULL
TITLE: Gene capable of enhancing S-adenosyl-L-methionine accumulation and process for producing S-adenosyl-L-methionine using the same
INVENTOR(S): Shiomi, Naofumi, Takasago, Japan
Fukuda, Hideki, Takasago, Japan
PATENT ASSIGNEE(S): Kanegafuchi Kagaku Kogyo Kabushiki Kaisha, Osaka, Japan
(non-U.S. corporation)

	NUMBER	KIND	DATE	
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PATENT INFORMATION:	US 5100786		19920331	<--
APPLICATION INFO.:	US 1988-288890		19881223 (7)	
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Schwartz, Richard A.			
ASSISTANT EXAMINER:	LeGuyader, John L.			
LEGAL REPRESENTATIVE:	Armstrong, Nikaido, Marmelstein, Kubovcik and Murray			
NUMBER OF CLAIMS:	7			
EXEMPLARY CLAIM:	2,7			
NUMBER OF DRAWINGS:	5 Drawing Figure(s); 5 Drawing Page(s)			
LINE COUNT:	768			
CAS INDEXING IS AVAILABLE FOR THIS PATENT.				
AB	A gene which provides resistance to at least one methionine derivative and is capable of enhancing accumulation of S-adenosyl-L-methionine (SAM) in a cell, a hybrid plasmid having the same, a cell transformed with the above hybrid plasmid, and a process for producing SAM using the above cell. According to the present invention, SAM, which has various therapeutic effects, can be produced in a large amount at a low cost.			

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(FILE 'HOME' ENTERED AT 18:19:15 ON 30 JUL 2001)

FILE 'REGISTRY' ENTERED AT 18:19:27 ON 30 JUL 2001
L1 1 S 9001-41-6/RN

FILE 'HCAPLUS' ENTERED AT 18:19:46 ON 30 JUL 2001

FILE 'REGISTRY' ENTERED AT 18:19:50 ON 30 JUL 2001
SET SMARTSELECT ON
L2 SEL L1 1- CHEM : 21 TERMS
SET SMARTSELECT OFF

FILE 'HCAPLUS' ENTERED AT 18:19:51 ON 30 JUL 2001
L3 4791 S L2
E BIOSYNTHESIS/CT
L4 5917 S PURINE NUCLEOSIDE# OR NUCLEOSIDES (L) PURINE OR PURINE RIBONU
L5 71 S L4 AND BPN/RL
L6 18 S L5 AND (ESCHERICHIA COLI OR E# COLI OR PARACOLOBACTRUM COLIFO
L7 1 S L3 AND L6
L8 1758 S L4 AND PREP/RL
L9 604 S L4 (L) PREP/RL
L10 35 S L9 AND (ESCHERICHIA COLI OR E# COLI OR PARACOLOBACTRUM COLIFO

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS
RN 9001-41-6 REGISTRY
CN Isomerase, glucose phosphate (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 6-Phosphoglucose isomerase
CN Cytokines, neuroleukin
CN D-Glucose-6-phosphate isomerase
CN E.C. 5.3.1.9
CN Glucose 6-phosphate isomerase
CN Glucose phosphate isomerase
CN Glucose phosphoisomerase
CN Hexose 6-phosphate isomerase
CN Hexose isomerase
CN Hexose phosphate isomerase
CN Hexose phosphate mutase
CN Hexosemonophosphate isomerase
CN Neuroleukin
CN Oxoisomerase
CN Phosphoglucoisomerase
CN Phosphoglucose isomerase
CN Phosphohexaoisomerase
CN Phosphohexamutase
CN Phosphohexose isomerase
CN Phosphosaccharomutase
MF Unspecified
CI MAN
LC STN Files: AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, PROMT, TOXLIT, USPATFULL
Other Sources: EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
3410 REFERENCES IN FILE CA (1967 TO DATE)
26 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3415 REFERENCES IN FILE CAPLUS (1967 TO DATE)

ACCESSION NUMBER: 2000:316776 HCPLUS
DOCUMENT NUMBER: 132:344082
TITLE: The preparation of recombinant *Escherichia coli* for manufacturing xanthosine
INVENTOR(S): Matsui, Hiroshi; Kawasaki, Hisashi; Shimaoka, Megumi;
Takenaka, Yasuhiro; Yamamoto, Yoko; Kurahashi, Osamu
PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
INT. PATENT CLASSIF.:
 MAIN: C12N001-21
 SECONDARY: C12P019-40; C12N015-09; C12N001-21; C12R001-19
CLASSIFICATION: 3-1 (Biochemical Genetics)
 Section cross-reference(s): 7, 10, 16
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000135078	A2	20000516	JP 1998-308795	19981029

ABSTRACT:

Recombinant *E. coli* deficient in xanthosine phosphorylase and GMP synthetase are prep'd. to promote manuf. of xanthosine (I) by the ***E*** *E. coli*. The two enzymes described above are responsible for conversion of I to xanthine and decrease of the prodn. of I. Other enzymes assoc'd. with exhaustion of I such as succinyl-AMP synthase are inactivated to further enhance the prodn. of I. Purine repressor function is also inactivated to enhance the prodn. of I. Prepn. of inactivated enzyme gene using known methods such as recombinant PCR recombinant *E. coli* deficient in xanthosine phosphorylase and GMP synthetase, and enhanced manuf. of I with the recombinant *E. coli* were shown.

SUPPL. TERM: xanthosine enhanced manuf recombinant *Escherichia*
INDEX TERM: Transcription factors
ROLE: BOC (Biological occurrence); REM (Removal or
disposal); BIOL (Biological study); OCCU (Occurrence); PROC
(Process)
 (gene purR; prepn. of recombinant *Escherichia coli*
 for manufg. xanthosine)
INDEX TERM: Fermentation
Metabolism, microbial
 (pregn. of recombinant *Escherichia coli*
 for manufg. xanthosine)
INDEX TERM: Purine nucleosides
ROLE: BPN (Biosynthetic preparation); MFM
(Metabolic formation); BIOL (Biological study); FORM
(Formation, nonpreparative); PREP (Preparation)
 (pregn. of recombinant *Escherichia coli*
 for manufg. xanthosine)
INDEX TERM: Gene, microbial
ROLE: BPR (Biological process); BIOL (Biological study);
PROC (Process)
 (pregn. of recombinant *Escherichia coli*
 for manufg. xanthosine)
INDEX TERM: *Escherichia coli*
 (recombinant; prepn. of recombinant *Escherichia coli*
 for manufg. xanthosine)
INDEX TERM: 9001-41-6, Phosphoglucose
 isomerase 9023-10-3 9023-55-6, GMP synthetase
 9023-57-8, Succinyl-AMP synthase 9024-33-3,
 6-Phosphogluconate dehydratase 9026-93-1, Adenosine
 deaminase 9027-68-3, Adenine deaminase 9030-21-1,

Purine nucleoside phosphorylase
9031-82-7, PRPP amidotransferase
ROLE: BOC (Biological occurrence); REM (Removal or
disposal); BIOL (Biological study); OCCU (Occurrence); PROC
(Process)
(prepn. of recombinant **Escherichia coli**
for manufg. xanthosine)

INDEX TERM: 146-80-5P, Xanthosine
ROLE: BPN (Biosynthetic preparation); BIOL
(Biological study); PREP (Preparation)
(prepn. of recombinant **Escherichia coli**
for manufg. xanthosine)

INDEX TERM: 270054-20-1 270054-21-2 270054-22-3 270054-23-4
270054-24-5 270054-25-6 270054-26-7 270054-27-8
270054-28-9 270054-29-0 270054-30-3 270054-31-4
270054-32-5 270054-33-6 270054-34-7 270054-35-8
270054-36-9 270054-37-0 270054-38-1 270054-39-2
270054-40-5 270054-41-6 270054-42-7 270054-43-8
ROLE: PRP (Properties)
(unclaimed nucleotide sequence; prepn. of recombinant
Escherichia coli for manufg.
xanthosine)